UCTC

Ulster County Transportation Council

TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

PROJECT EVALUATION CRITERIA

Revised

July 2006

HOW THIS APPROACH WORKS

The "correlation" approach to evaluating project applications is one way to select projects for the Ulster County Transportation Council's (UCTC) Transportation Improvement Program (TIP). The correlation approach utilizes criteria based upon the goals and objectives of the Federal Highway Administration's "Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users" (SAFETEA-LU) legislation, the UCTC's Long-Range Transportation Plan, the Statewide Transportation Plan, Congestion Management Program requirements (formally known as CMS), the New York State Energy Plan, and the New York State Department of Transportation's (NYSDOT) TIP project application standards.

Under the correlation approach, broad goal categories are identified based upon the eight SAFETEA-LU planning factors coupled with specific goals and objectives found within the UCTC's Long-Range Transportation Plan. Proposed projects are then assigned a score based upon the correlation, or degree of relationship, a proposed project has with the broad goal category. Projects accumulate or lose points depending on a project's degree of correlation or "relatedness" to each broad goal category.

Bridge and pavement resurfacing-related projects are evaluated separately from all other projects. The purpose for separating out bridge and pavement resurfacing-related projects is because they score differently than other projects but are highly important to the overall transportation system. Also, bridge and pavement preservation are identified as a priority in the UCTC's Year 2030 Long-Range Transportation Plan.

After project applications are evaluated, the project's score will typically determine the project's ranking for placement on the TIP. High-ranking applications will be grouped together with other projects selected on a basis of **merit**. The Policy Committee approves the final selection of all TIP projects.

BACKGROUND

The goal of the project ranking criteria is to ensure consistency between the mix of projects and investments of the Transportation Improvement Program (TIP) and the goals and policies implemented through the Long-Range Transportation Plan. The following proposed criteria are intended to serve as a starting point when evaluating projects, and it is expected that they will evolve over time.

CRITERIA

The following are the basic minimal screening criteria that must be met for a project to advance to merit evaluations:

1. Consistency with SAFETEA-LU, UCTC, local, and statewide plans
2. Provision of local matching funds
3. Defined scope and timing
4. Meeting an identified need
5. Federal-aid eligibility
6. Meet or exceed a minimum project total of $50,000

Proposed transportation projects will be evaluated against each of the 16 specific criteria below.

Criteria 1 - 10: The initial range of criteria includes the minimum requirements for the UCTC transportation planning program defined by federal regulations. Other federal and State regulations applicable to Ulster County include environmental justice impacts and consistency with the New York State Energy Plan. Air quality conformity is not a requirement for Ulster County. However, projects are evaluated for air quality impacts or benefits to help sustain a clean air environment.

Criteria 11 – 12: Regional factors considered include the UCTC Congestion Management Program or CMP (formally known as CMS) requirements and NYSDOT's recently completely Statewide Long-Range Transportation Plan.

Criteria 13 – 15: Local priorities are also considered in project evaluation. This includes consistency and support for local and regional Land Use Plans, local/sponsor priority, and advances the recommendations of a recently completed planning study.

Criteria 16: Facility Condition Score Matrix. Only bridge and pavement resurfacing-related projects advance to this criterion.

METHODOLOGY

Federal regulations are quoted directly from the Federal Register for the eight SAFETEA-LU planning factors; the remaining criteria are more broadly described. In accordance with the adopted UCTC Operating Procedures, "projects identified in the first year of the TIP/STIP have first right to the funds available." Projects already on the TIP/STIP have the highest priority. General project characteristics for each criterion are listed to determine whether a proposed project meets the objective of the criterion, and

subsequently earn points under that criterion. If a project is deemed not to have any correlation with the purpose or characteristics of the criterion, it earns zero points for that criterion. It is not expected that a project will earn points for every criterion. All projects will be evaluated consistently, as well as each project's merits relative other projects being proposed.

The number of points assigned for each project is determined by the degree of relatedness or "correlation" the project has to a specific criterion. Projects are evaluated using the following three levels: "high correlation", "moderate correlation", or "low correlation", earning 10 points, 5 points or 1 point, respectively. A project earns points according to how it correlates to each broad goal category. In some cases, points could be deducted if a project has an adverse impact to a broad goal category.

Points earned are totaled to give each project a total score. Projects are then ranked with other projects by total score. Bridge and pavement resurfacing projects are ranked separately. The priority order will be further refined based on eligibility and availability of specific funding sources (such as NHS, bridge, Enhancements, etc.) and merit. Fiscal constraint will continue to influence the timing of projects, as undoubtedly will other unforeseen matters.

SAFETEA-LU PLANNING FACTORS

1. Support the **economic vitality** of the metropolitan planning area, especially by enabling global competitiveness, productivity, and efficiency. General project characteristics include:

- Enhance the region's attractiveness to new and existing businesses.
- Support the role of walking and bicycling in promoting tourism.
- Support "Main Street" improvement programs with attractive pedestrian facilities.
- Support aviation, rail, freight transfer and harbor facilities that address industry, business, recreation and quality of life needs.
- Employ innovative financing/partnerships that reflect the scope of interests impacted or served.
- Incorporate goods movement-supportive design features.
- Encourage compact land use patterns.

High Correlation Projects – 10 points	
• Improves access to existing regional activity centers which retain jobs	• Improves rail, vehicular, or waterborne access to freight distribution facilities or major industrial districts
• New access to regional activity centers which create new jobs	• Transportation demand strategies, programs and incentives such as improved transit services
• On route where (heavy) trucks are more than 20% of average daily traffic	• Passenger ferry system deployment
• Implement multi-use trail systems to facilitate tourism	• Improve access to historical, cultural, and recreational facilities
Moderate Correlation Projects – 5 points	
• On route where heavy trucks are between 10% and 20% of average daily traffic	• Passenger ferry planning analysis
• Bicycle/pedestrian planning to promote connections to historic, cultural and recreational activity centers	
Low Correlation Projects – 1 point	
• Supports mobility needs of business and industry not in an activity center	

2. Increase the **security** of the transportation system for motorized and non-motorized users. General project characteristics include:

- Surveillance cameras at park and ride lots, cameras installed on transit vehicles and at intermodal transit facilities, and at railroad crossings.
- Emergency Vehicle Preemption.
- Illuminated corridors, intersections and park and ride lots.
- Expanding and enhancing the communications infrastructure.

High Correlation Projects – 10 points	
• New or improved surveillance camera/sensor systems at park and ride lots, transit, and at railroad crossings	• New or improved barriers or fencing along active freight railroad corridors keeping people away and off the tracks
• Install or improve Emergency Vehicle Preemption system	• New or improved illumination for corridors, intersections, park and ride lots
• New or improved pedestrian 'wait' stations for at-grade railroad crossings	
Moderate Correlation Projects – 5 points	
• Develop or update a transportation/ public transportation security plan	• Develop or update implementation plans to support High Correlation projects identified above
• Facilitate the expansion or enhancement of the communications infrastructure	
Low Correlation Projects – 1 point	
• A project that demonstrates a marginal contribution to the security of the surface transportation system	

3. Increase the **accessibility and mobility** options for people and freight. General project characteristics include:

- Reduces travel time.
- Relieves congestion.
- Improves information and convenience to users.
- Add to/optimizes existing capacity.
- Increases access to bus, train stations.
- Adds frequency and service of bus/transit/rail.
- Addresses Americans With Disability Act (ADA) requirements

High Correlation Projects – 10 points	
• New/expanded transit infrastructure – platforms, parking and stations, rail lines	• Access to airports, freight distribution facilities, or major industrial districts
• Grade separations on existing highway to improve flow	• ITS systems deployment (such as enhanced EZpass, advanced public transit systems, advanced railroad crossing detour systems)
• On route where heavy trucks are more than 20% of average daily traffic	• Opens bridge or removes detour
• New signal which relieves congestion	• Roundabouts
• New road or turning lane	
Moderate Correlation Projects – 5 points	
• Upgrade existing transit infrastructure	• Bicycle/pedestrian facility within established neighborhood or activity center
• Planning for new multimodal mobility and transit coordination improvements	• On route where heavy trucks are between 10% and 20% of average daily traffic
Low Correlation Projects – 1 point	
• On route where heavy trucks are less than 10% of average daily traffic	• Signing and informational systems (other than ITS)

4. Protect and enhance the **environment**, promote energy conservation, and improve quality of life. General project characteristics include:

- Eliminates vehicle trips – promote bike/pedestrian, transit facilities.
- Generates positive effect on water quality (limits impervious surfaces, runoff).
- Abates noise.
- Aesthetics considered in design (context-sensitive design, landscaping, visual easements, scenic overlooks).
- Consistency with the New York State Energy Plan

High Correlation Projects – 10 points	
• Preservation of wetlands	• Clean fuel buses/vehicles - alternative fuel infrastructure
• Directly promotes shift away from single occupancy vehicle (SOV)	• Preservation of existing greenway corridors
• Creates an improvement in the quantity/quality of water runoff	• Project preserves open space
• Implement railroad corridor quiet zone	• Project meets or exceeds statewide energy conservation goals, objectives, and recommendations
Moderate Correlation Projects – 5 points	
• Preservation of historic structures in national or state register, or of significant local interest	• Corridor and intersection enhancements
• Project contributes to the clean up of environmental hazards	• Noise barrier projects
• Project demonstrates a significant effort to address statewide energy conservation goals, objectives, and recommendations	
Low Correlation Projects – 1 point	
• Project preserves scenic view sheds	• Project supports educating public about environmental stewardship
• Project demonstrates a marginal effort to address statewide energy conservation goals, objectives, and recommendations	
Capacity increase for SOV = *minus* 5 points **Adverse impact on environmentally sensitive areas = *minus* 5 points** **In conflict with State Energy Plan = *minus* 5 points**	

5. Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight. General project characteristics include:

- Promotes intermodalism (use of alternate modes - park and ride lots, access to transit/rail, bike/pedestrian facilities, feeder service, signage).
- Eliminates major barrier in regional corridor; provides gap closure, links jurisdictions and connects major activity centers.
- Provides linkages between urban and rural transportation systems.
- Removes height or weight restrictions.

High Correlation Projects – 10 points	
• Commuter or inter-city transit project	• Provides gap closure in major regional corridor
• Development of new intermodal transportation centers	• Linking urban and rural off road bicycle/ pedestrian trail networks
• Provides gap closure in major regional corridor	• Expand park and ride lots, park and hike lots, park and bike lots
Moderate Correlation Projects – 5 points	
• Rehabilitation of intermodal transportation centers	• Eliminates or overcomes minor barrier in an existing major regional corridor
• Provides gap closure in minor regional corridor	• Planning for the integration of multimodal networks
Low Correlation Projects – 1 point	
• Eliminates or overcomes barrier in a minor regional corridor	• Provides gap closure in local corridor

-Major regional corridors include routes such as I-87, Kingston-Rhinecliff Bridge, and Mid-Hudson Bridge which connect our region with other regions.

-Minor regional corridors include US 9W, US 209, SR 44/55, SR 299, SR 199, SR 28, SR 32, SR 52, SR 375 – routes providing connectivity within our region.

-Major barriers include problems such as facility closures, lengthy detours or delays, geography such as rivers and mountains, or rail rights-of-way.

-***Minor barriers*** include issues such as weight/height restrictions, poor intersection alignments.

6. Promote efficient **system management and operation**. General project characteristics include:

- Increases the efficiency of the surface transportation system.
- Result of or establishes multi-jurisdictional or public-private partnership.
- Supports coordination of land use and transportation systems.
- Reduces existing congestion/prevents future congestion (improve flow, reduce travel time).
- Reduces SOV trips and promotes transit.

High Correlation Projects – 10 points	
• Signal Light Re-Timing/Upgrade Controller	• Transportation demand management strategies, programs and incentives
• Signal interconnect of 6 or more signals	• Improves roadway at LOS E or F
• Bicycle/pedestrian facility within established neighborhood or activity center	• Implementation of corridor access management strategies
Moderate Correlation Projects – 5 points	
• Upgrade existing interchanges	• Signal interconnection of 2 to 5 signals
• Planning for intelligent transportation systems implementation (ITS)	• Improves roadway at LOS D
• Traffic calming	• Median treatments
• Intersection improvements	• Functional class improvements to rural interstates, rural principal arterials, urban interstates, or urban freeway/expressway
Low Correlation Projects – 1 point	
• Functional class - Improvements to rural minor arterials, rural major collectors, urban principal arterials, or urban minor arterials	
New non-interconnected signal (lessens efficiency) = *minus* 5 points	
LOS on limited access adversely affected = *minus* 5 points	

7. Increase the **safety** of the transportation system for motorized and non-motorized users. General project characteristics include:

- Reduces accidents.
- Provide at-grade rail crossing safety improvements.
- Provide grade separation between rail and all other modes.
- Reduces vehicle speeds or traffic volumes (in areas with high potential for pedestrian and bicycle activity).
- Improves accommodations for non-motorized travel.
- Reduces conflicts between bike/pedestrian modes and vehicle traffic.

High Correlation Projects – 10 points	
• Improves sight distance, intersection alignment, geometry problems	• Add additional traffic lights to intersections to improve signal visibility
• New median barriers/guardrail	• New (warranted) traffic signal where none exist
• Interchange modifications	• Emergency vehicle preemption system implementation
• Grade separations on existing highways - Rail grade crossing improvements	• Pedestrian crosswalk safety systems, pedestrian wait stations at railroad crossings, refuge islands, bicycle friendly in ground storm grates, route signage
• Reduces accidents at intersections and/or segments with accident rates higher than average for that type of facility	• Red light running intersection photo enforcement implementation
• Project supports work zone safety improvements	• Upgrade traffic lights to LED technology
Moderate Correlation Projects – 5 points	
• Traffic calming initiatives (e.g. speed bumps, rumble strips, road re-striping)	• Upgrade median/guardrail
• Planning for safety and security systems (e.g. transit security plan development, emergency management planning, bike/ped trail systems planning)	• Improves emergency access
• Corridor study to improve safety using access management design strategies	• Reduces accidents at intersections and/or segments with accident rates on average for that type of facility
• Transit equipment for safety – such as bus shelters	• Establish bike/ped trail regional system standards
Low Correlation Projects – 1 point	
• Improves lighting for all facilities	• Reduces accidents at intersections and/or segments with accident rates lower than average for that type of facility

8. Emphasize the **preservation of the existing transportation system**. General project characteristics include:

- Optimal replacement cycle - delay need for repair/reconstruction (reduces truck vehicle miles traveled (VMT), diverts heavy truck traffic, pavement/resurfacing).
- Facility and fleet replacement or modernization.

High Correlation Projects – 10 points	
• Normal pavement or bridge rehabilitation and maintenance on UCTC functional classification system	• Existing transit facility replacement/rehab that prolongs useful life of assets
• Reconstruction or resurfacing of arterial highways	• Transit vehicle replacement/rehab consistent with Federal Transit Administration (FTA) standards
• Railroad crossing warning signals/signage replacement	• Maintains/preserves publicly owned bicycle and pedestrian facilities
• Park and ride lot upgrades and maintenance	• Planning for maintenance and preservation of transportation facilities
Moderate Correlation Projects – 5 points	
• Normal pavement or bridge rehabilitation when not in pavement or bridge management system	• Existing transit facility replacement/rehab that prolongs useful life of assets (improves “adequate” condition ratings)
• Reconstruction of collector highways	• Roadway and bridge support infrastructure improvements (drainage, retaining, signal)
Low Correlation Projects – 1 point	
• General resurfacing of roadway	• Signage replacement

OTHER FEDERAL REGULATIONS

9. Air Quality – effects on air quality; US Environmental Protection Agency (EPA) standard for ozone. Ulster County is not required to meet air quality standards set by the EPA. However, project applications are considered and scored based on their contribution or impact to the air quality in Ulster County. General project characteristics include:

- Improves traffic flow, but does <u>not</u> add lanes/capacity or relocate facilities.
- Reduces vehicle miles traveled (VMT), discourages single occupancy vehicles (SOV).
- Reduces congestion, or supports transit and more compact development.

High Correlation Projects – 10 points	
• New (warranted) traffic signal where none exist, and improves air quality by relieving congestion	• Parking Management Systems
• New or improved transit facilities (stations, buses, park & ride lots)	• Transportation demand strategies, programs and incentives
• New bicycle/pedestrian facility serving primarily a transportation use	• Removes detour
Moderate Correlation Projects – 5 points	
• Traffic flow improvements (such as intersection channelization and alignments, signal upgrade/ timing/interconnections)	• Bicycle/pedestrian improvements to existing facilities (roadway or bike/ped)
Low Correlation Projects – 1 point	
• Planning projects that support air quality improvement (e.g. intelligent transportation systems planning and design, transit planning, ferry studies)	
Increase VMT/congestion = *minus* 5 points	

10. Social Impacts/Environmental Justice. General project characteristics include:

- Low-income and minority populations not disproportionately affected in adverse way.
- Low-income and minority populations not prevented from, or caused to have a significant delay in, the receipt of benefits.
- Serve elderly or mobility-impaired populations.

High Correlation Projects – 10 points	
• Improves accessibility and mobility and enhances community cohesion	
Moderate Correlation Projects – 5 points	
• Improves accessibility with no negative impact to community cohesion	
Low Correlation Projects – 1 point	
• Marginal improvement in access or community cohesion with no negative impact to community cohesion	
Disproportionately impacts access or community cohesion = *minus* 5 points	

Low-income and minority groups as defined by Title VI of the Civil Rights Act (Environmental Justice) includes Black, Hispanic, Asian American, American Indian and Alaskan Native, and persons whose household income is at or below the U.S. Department of Health and Human Services poverty guidelines.

REGIONAL FACTORS

11. Congestion Management Program (CMP). CMP is formally known as CMS (Congestion Management System). The name change was identified in federal SAFETEA-LU legislation. General project characteristics include:

- Encouraging the use of public transit, rideshare, park and ride/carpool, and other non-traditional non-motorized transportation modes.
- Operational improvements (signal timing, etc.).
- Eliminate bottlenecks (physical barriers).
- More efficient freight movement.
- Incident management.
- Public education.
- Land use/growth management.
- ITS applications.
- Access management.
- Employer programs (variable work hours, telecommuting, parking management).

High Correlation Projects – 10 points	
• Project directly mitigates congestion for areas identified in the Year 2005 MHVTMA* CMP report and subsequent follow up reports	
Moderate Correlation Projects – 5 points	
• Project moderately mitigates congestion for areas identified in the Year 2005 MHVTMA* CMP report and subsequent follow up reports	
Low Correlation Projects – 1 point	
• Project somewhat mitigates congestion for areas identified in the Year 2005 MHVTMA* CMP report and subsequent follow up reports	

* MHVTMA = Mid Hudson Valley Transportation Management Area (Dutchess, Orange, and Ulster Counties)

12. Statewide Transportation Plan. General project characteristics include:

- Consistency with statewide long-range transportation plan.

High Correlation Projects – 10 points	
• Consistent with statewide long-range transportation goals, objectives, and programs	
Moderate Correlation Projects – 5 points	
• Corridor projects within the UCTC planning region (For example I-87 study, high speed rail, ferry boat studies)	
Low Correlation Projects – 1 point	
• Corridor projects of state priority outside region which improves accessibility, mobility, or intermodal connectivity of UCTC area network	
In conflict with State LRT Plan = *minus* 5 points	

LOCAL FACTORS

13. Land Use Plans

- Consistency with local and regional land use plans.

High Correlation Projects –10 points	
• Local or Regional Land Use Priority #1	
Moderate Correlation Projects –5 points	
· Local or Regional Land Use Priority #2	
Low Correlation Projects –1 point	
· Local or Regional Land Use Priority #3	
In conflict with Local or Regional Land Use Plans = *minus* 5 points	

14. Sponsor's Priority

· Priority ranking assigned by municipality or project sponsor.

High Correlation Projects – 10 points	
• Local Priority #1	
Moderate Correlation Projects – 5 points	
• Local Priority #2	
Low Correlation Projects – 1 point	
• Local Priority #3	

15. Planning Study Recommendation

• Project need/justification by recently completed planning study.

High Correlation Projects – 10 points	
• Project recommended in the UCTC's Year 2030 Long Range Transportation Plan	• Project recommended in other UCTC funded planning study within last five years
Moderate Correlation Projects – 5 points	
• Project recommended in locally funded planning study within last five years	
Low Correlation Projects – 1 point	
• Project need is justified through significant statistical and qualitative data	

16. Bridge and Paving Projects Only

The purpose of the facility condition score matrix is to evaluate bridge replacement, bridge maintenance, and pavement resurfacing projects only using the following criteria (Maximum Score = 10):

FACILITY CONDITION SCORE MATRIX				
Road Pavement Condition Score	**Traffic Volume (average annual daily traffic)**			
	<3,000	**3,000-8,000**	**8,001-20,000**	**>20,001**
PVT ≤ 4	7	8	9	10
PVT ≤ 5	6	7	8	9
PVT ≤ 6	4	5	6	7
PVT ≤ 7	0	1	1	3
Bridge Rating				
< 3.0	7	8	9	10
3.1-3.49	6	7	8	9
3.5-4.49	4	5	6	7
4.5-4.99	2	3	4	5